REMARKS

In response to the non-final Office Action mailed March 31, 2005, claim 1 has been amended to include the features of claims 8 and 11, which have been cancelled. Additional support for the amendment of claim 1 can be found, e.g., at page 12, paragraphs [0070]-[0072] of the specification.

Claims 9, 12 and 14 have been amended to change the dependency thereof in view of the amendment of claim 1.

Claim 18 has been amended to add the word "pivotally" and to clarify that only one follower lever is rigidly connected to the valve lever at a time.

Claim 22 has been amended to correct a typographical error.

After this amendment, claims 1-7, 9, 10, and 12-23 remain pending for further examination.

It is also noted that paragraph [0091] of the specification has been amended to correct a minor typographical error.

As an initial matter, Applicants graciously acknowledge the indication of allowable subject matter provided on page 7 of the Office Action and the conscientious efforts to examine the present application.

However, because the Applicants believe that DE 490 735 does not teach the features of original claim 11, claim 1 has been amended to incorporate this feature. Initially, it is noted that, by adding the feature of claim 11, the novelty rejections noted in

Sections 1 and 2 of the Office Action, respectively based upon Rhoads and DE 21 22 523, are overcome by this amendment, as neither reference teaches the final feature ("at least one slot . . .") of amended claim 1. With respect to Rhoads, it is noted that the passageway 16 continuously permits communication between the cylinder spaces, even when the pistons 18, 20 are disposed in their upper dead position.

Turning to the non-obviousness of amended claim 1, it is noted that at the end of Section 5 of the Office Action, it was indicated that DE 490 735 discloses slit 10 in the single cylinders. While Figure 3 ("Abb. 3") of DE 490 735 shows numerous slits 10 in cylinder 1, it is respectfully submitted that these slits 10 are not located in a common cylinder wall that separates cylinders 1 and 2, such that uncovering the slits 10 would permit communication between cylinders 1 and 2. Instead, as shown in Figure 3, the slits 10 of DE 490 735 are not capable of permitting communication between the cylinder spaces of cylinders 1 and 2. Rather, slits 10 only allow communication with chamber 15 that is in communication with channel 14 for supplying a fresh charge to the cylinder 1.

It is further noted that slits 11 and 12 are formed in the cylinder wall of cylinder 2. Slits 11 are designed to discharge the combusted charge and slits 12 are designed to communicate a fresh charge into the cylinder space of cylinder 2. However, neither

slits 11 or 12 enable the cylinder 1 to directly communicate with cylinder 2 via a common cylinder wall.

Thus, it is respectfully submitted that DE 490 735 does not teach or suggest this feature of the amended claim 1.

The inventive advantages of the engine of claim 1 are discussed in greater detail at pages 12-14. Because none of the prior art references teach or suggest the at least one slot in accordance with amended claim 1, nor recognize the significant advantages thereof, it is believed that amended claim 1 is non-obvious and in a condition for allowance.

In Section 3 of the Office Action, claim 18 was rejected as lacking novelty in view of Hendriksma et al (US 6,668,779). Applicants respectfully traverse.

The valve lever of Hendriksma operates such that either both the first and second high-lift cam followers 46a, 46b are supported by the longitudinally-movable latch block 56, which comprises first and second latches 64a, 64b for engaging the noses 70a, 70b of the respective followers 46a, 46b, so as to move together with the longitudinal follower body 12, or neither are supported by the noses 70a, 70b of the latch block 56. See e.g., col. 3, lines 49-61 and col. 4, lines 2-12 and 22-29. In other words, it does not appear to be possible for latch block 56 to selectively engage one of the cam followers 46a, 46b without also engaging the other.

Furthermore, upper surface 21 of body 12, or bearing assembly 28, is designed to contact the central low-lift cam lobe 23 of camshaft 27. See col. 3, lines 16-25. On the other hand, the respective upper surfaces 50 of the first and second high-lift cam followers 46a, 46b are designed to contact the two high-lift lobes 25 of camshaft 27. See col. 3, lines 39-48.

Thus, it is respectfully submitted that Hendriksma fails to teach the last feature of claim 18, namely "the interlocking mechanism is arranged and constructed to selectively rigidly connect only one of the first follower lever and the second follower lever to the valve lever at a time, wherein when the first follower lever is interlocked with the valve lever, the valve is actuated in accordance with the first cam and, when the second follower lever is interlocked with the valve lever, the valve is actuated in accordance with the second cam."

In Section 3 of the Office Action, it was stated that "when the first follower lever 46a is interlocked with the valve lever 12, the valve is actuated in accordance with the first cam 23, and when the second follower lever 46b is interlocked with the valve lever 12, the valve is actuated in accordance with the second cam 25." However, to the contrary, it is believed that when latches 64a, 64b of latch block 56 are moved into interference with the noses 70a, 70b of the first and second high-lift cam followers 46a, 46b, the valve lever body 12 is actuated in accordance with the

high-lift cams 25 due to their abutment against the upper surfaces 50 (or roller 52 as shown in Fig. 7) of the cam followers 46a, 46b. On the other hand, when the latch block 56 is shifted such that the latches 64a, 64b do not interfere with the noses 70a, 70b (i.e., neither of cam followers 46a, 46b are rigidly connected to or interlocked with the valve lever body 12), the valve lever body 12 is actuated in accordance with the low-lift cam 23, which will abut the upper surface 21 or the bearing assembly 28.

Thus, it is believed that claim 18 is novel over Hendriksma.

Furthermore, at col. 4, lines 48-60, Hendriksma teaches away from the possibility that only one of the two cam followers 46a, 46b is latched and indicates that substantial damage could result, which substantial damage would have motivated a skilled person against utilizing the Hendriksma valve lever in a manner such that only one of the cam followers 46a, 46b is selectively latched at a time.

Moreover, any modification to Hendriksma required to achieve the invention of claim 18 would necessarily require a change of the principle of operation thereof.

Consequently, in view of the last two sections of MPEP 2143.01 ("The proposed modification cannot render the reference unsatisfactory for its intended purpose" and "The proposed modification cannot change the principle of operation of a

reference"), it is respectfully submitted that claim 18 also is non-obvious over Hendriksma and is in a condition for allowance.

Because independent claims 1 and 18 are believed to be patentable, additional arguments concerning the dependent claims are not believed to be necessary.

Conclusion

Each issue raised in the Office Action dated March 31, 2005, has been addressed, and it is believed that claims 1-7, 9, 10, and 12-23 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott Wakeman (Reg. No. 37,750) to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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